

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions,
and listings, of claims in the application:

LISTING OF CLAIMS:

1-15 (canceled)

16. (new) A method for structuring spatially-referred
information (spatial data) stored in an information source, said
information defining objects in a n-dimensions space and
including for each object information of form, information of
position and information of semantic or formal attributes, said
attributes being characteristics or properties of said object,
said method comprising steps of:

defining structure of object families in function of
the concerned application to obtain elementary families,

browsing information source,

identifying topologic information,

identifying attributes,

cutting the topologic information into geometric
information comprising information of form and information of
position,

gathering topologic information into a single topologic table, referred as the corpus, by juxtaposing the elementary families; for each elementary family, the corpus contains all the geometric forms defining objects with similar attributes,

gathering semantic and formal attributes associated with the objects in a table of attributes, referred as the index, and

storing in an information storage means a block of structure information constituted by the said corpus and the said index.

17. (new) The method according to claim 16, further comprising a mechanism of corresponding between the corpus and the index.

18. (new) The method according to claim 17, wherein the mechanism of correspondence comprise a correspondence of position between the topologies in the corpus and the attributes in the object.

19. (new) The method according to claim 16 further, comprising the steps of: defining a hierarchical set of criteria related to the attributes of the objects for a given application,

and classifying the objects into elementary families containing only objects or parts of object having the same attributes by applying the criteria in the order of their hierarchy.

20. (new) The method according to claim 19, wherein at least a sub-family of objects having the same attributes is subdivided into elementary families as a function of at least one topologic criterion.

21. (new) The method according to claim 19, wherein groups of objects comprising one or more elementary families selected as a function of the hierarchic level of the criterion of attributes that is used, are globally operated.

22. (new) The method according to claim 19, wherein objects are operated by calling a criterion present in at least two branches of the hierarchy of said criteria.

23. (new) An application of the method according to claim 16, for making blocks of structured information from pre-existing spatially-referred information stored in files under any format, each block of information comprising a corpus of topologic information and an index of attributes.

24. (new) An application according to claim 23, characterized by the following steps:

defining a hierarchy for criteria of attributes in function of the application,

analyzing a source of information for identifying on one hand the topologic information, and, on the other hand, the attributes,

choosing a set of basic forms in function of the nature of information and of the aim of the application,

building a topologic table of forms (corpus) and a table of the attributes (index),

building a mechanism of correspondence between said table of forms and said table of attributes, and

arranging the elementary families of the block.

25. (new) A system for structuring spatially-referred information (spatial data) stored in an information source, said information defining objects in a n-dimensions space and comprising for each object information of form, information of position and information of semantic or formal attributes, said attributes being characteristics or properties of said object, said system comprising:

means for defining structure of object families in function of the concerned application to obtain elementary families,

means for browsing information source,

means for identifying topologic information,

means for identifying attributes,

means for cutting the topologic information into geometric information constituting information of form and information of position,

means for gathering topologic information into a single topologic table, referred as the corpus, by juxtaposing the elementary families; for each elementary family, the corpus contains all the geometric forms defining objects with similar attributes,

means for gathering semantic and formal attributes associated with the objects in a table of attributes, referred as the index, and

information storage means for storing a block of structure information constituted by the said corpus and the said index.

26. (new) The system according to claim 25, wherein the cutting means are arranged for describing simultaneously the form

and the position of each object by combining several of said geometric forms.

27. (new) The system according to claim 26, further comprising means for selecting, as at least several of said geometric forms, basic forms composed from elementary forms.

28. (new) An electronic apparatus comprising:
display means,
means for acquiring data and controls,
means for storing information that contains at least one block of structured spatially-referred information defining objects in a n-dimensions space and comprising for each object information of form, information of position and information of semantic or formal attributes that are characteristics or properties of said object, said structured information having separate tables for topologic information and information attributes, and
means for operating said at least one block of information.

29. (new) The apparatus according to claim 28, further comprising a data transmission network for downloading said at least one block of topologic information.

30. (new) The apparatus according to claim 29, wherein said apparatus provides access to assistance services, particularly for road traffic or meteorology.